

## **APPENDIX L**

### Photographs

Appendix L. Photographs taken throughout the study watersheds. The first section of photographs include images captured at representative sites throughout the watersheds. The last section (L17-L22) includes photographs taken of culverts located downstream from discharge monitoring locations. These photographs were taken to help assess how similar (e.g., unobstructed) the culvert openings were prior to each monitoring event. Photographs were not collected prior to the first storm (3/28/00) because a camera was not available at the time (culverts were cleaned just before sampling/monitoring occurred).



Appendix L-1. Photographs taken of various impervious surfaces and associated stormwater pollution problems: automobile-related petroleum pollution (a); antifreeze (b); parking lots and roads (c,d,e,g); and stormwater drain (f). Photographs taken between 2001 - 2002.





Appendix L-2. Photographs taken on 6/28/00 of impervious surfaces and stormwater runoff in the study watersheds.





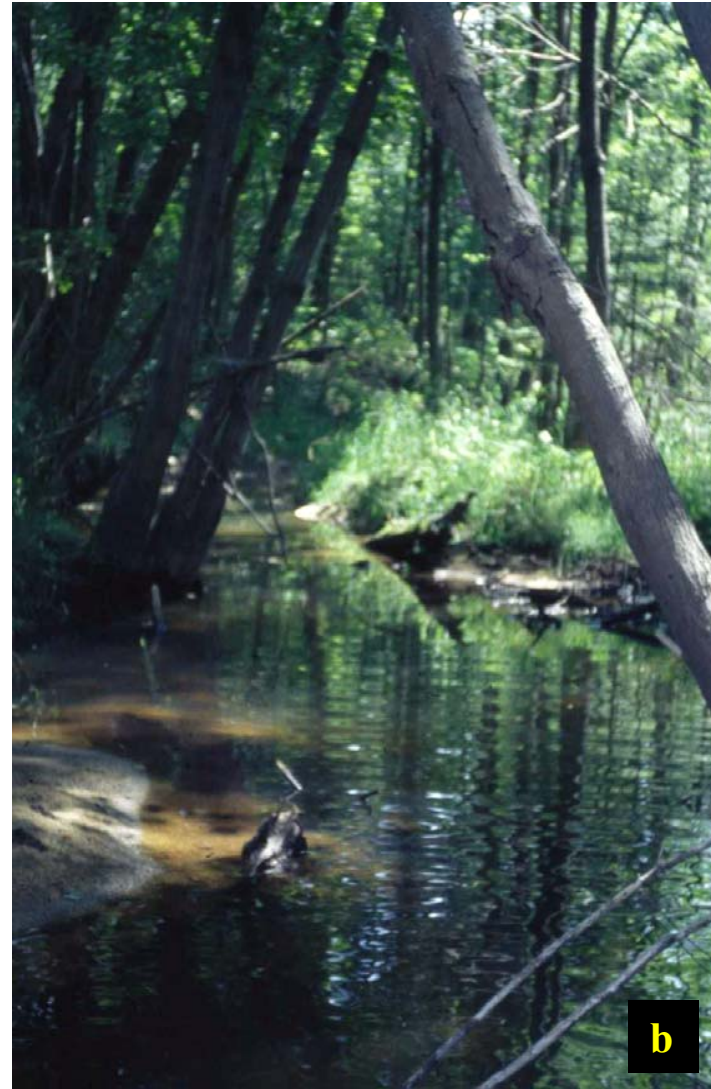
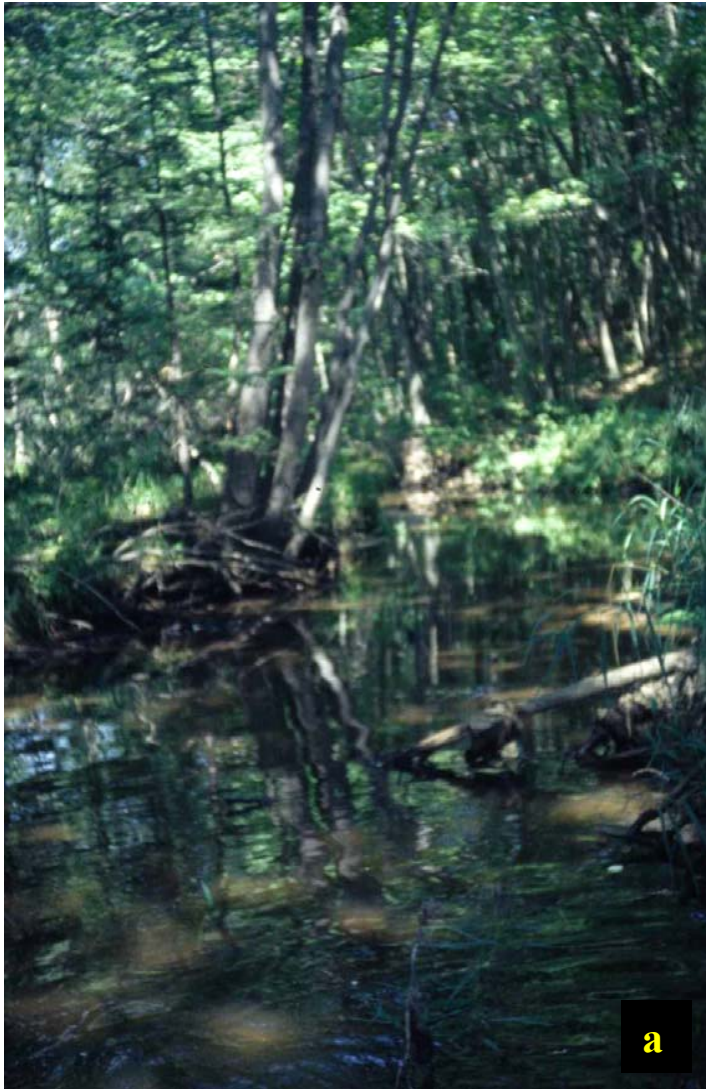
Appendix L-3. Photographs taken on 5/4/00 near RB-3.961 (a-c) and on 7/23/00 near RB-3.961 (d). Photograph “d” is oriented sideways.





Appendix L-4. Photographs taken on 5/13/99 near RB-2.5~ (a) and on 7/23/01 (b) and 5/13/99 (c-d) near RB-1.45~. Photographs “a” and “d” are oriented sideways.





Appendix L-5. Photographs taken on 5/13/99 near RB-0.071.





Appendix L-6. Photographs taken of: an in-stream detention basin near LC-Mn-2.85 (a); a section lacking an intact riparian zone near LC-M-2.65 (b,c); and a channelized section near LC-M-3.0. Dates: 11/16/02 (a,c) 7/12/00 (b); and 5/4/00 (d).





**a**



**b**



**c**



**d**

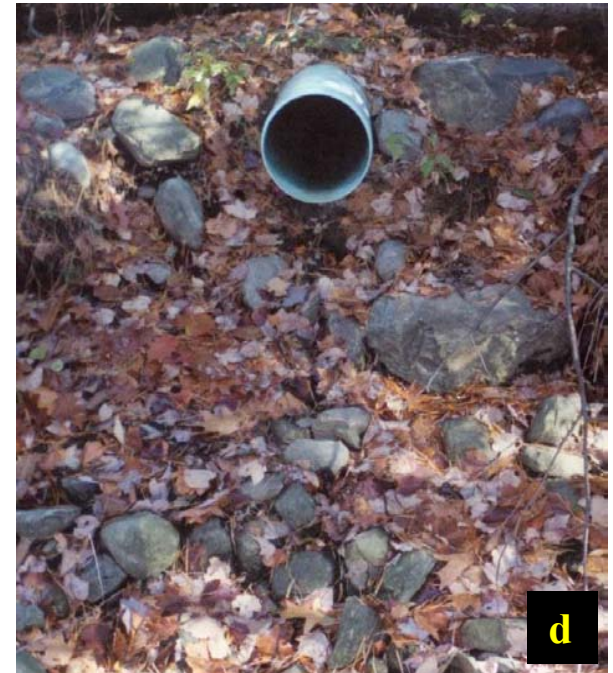
Appendix L-7. Photographs taken of an in-stream detention basin, dam, and concrete outfall (a), taken on 5/13/02, and portions of LC-M flowing through a golf course between stream mile LC-M-2.3~ and 2.7~ (b-d), taken on 11/16/02.





Appendix L-8. Photographs taken near LC-M-1.4 to 1.6 where riparian zone vegetation and floodplains have remained fairly intact. Note, however, what appears to be signs of stress from increased stormwater volumes due to development of the upper watershed (a). Dates: 10/24/00 (a) and 5/13/00 (b-d).





Appendix L-9. Photographs taken near LC-M-0.9~ of: a shaded section of stream (a), a stormwater detention pond and its outfall pipe (b-c), and a detention basin outfall pipe near LC-M-0.65~ (d). Date: 6/12/99 (a), 7/23/01 (b-c), and 11/10/00 (d).





Appendix L-10. Photographs of severe streambank erosion and channel overwidening near LC-M-0.6~ (a-c) and a bridge over the stream (d). Dates: 7/13/00 (a,c), 12/1/00 (b), and 10/18/00 (d). Note the 1-m long measuring stick in photos a and c for scale.





Appendix L-11. Photographs taken of LC-M-0.5~ immediately below Foden Road on 5/18/83 (a) and 11/26/02 (c). Notice the apparent filling activity and riprap on the streambanks and in the channel. The arrow points to the top of the culvert underneath the road. Photographs b and d were taken on 4/18/01 of a channelized section of the stream approximately 100-m downstream from photographs a and c.





Appendix L-12. Photographs taken on 12/1/00 at approximately LC-M-0.4~. Notice the wide, deep channel beneath the culvert (a) and the severe erosion on the bank opposite the culvert (b).





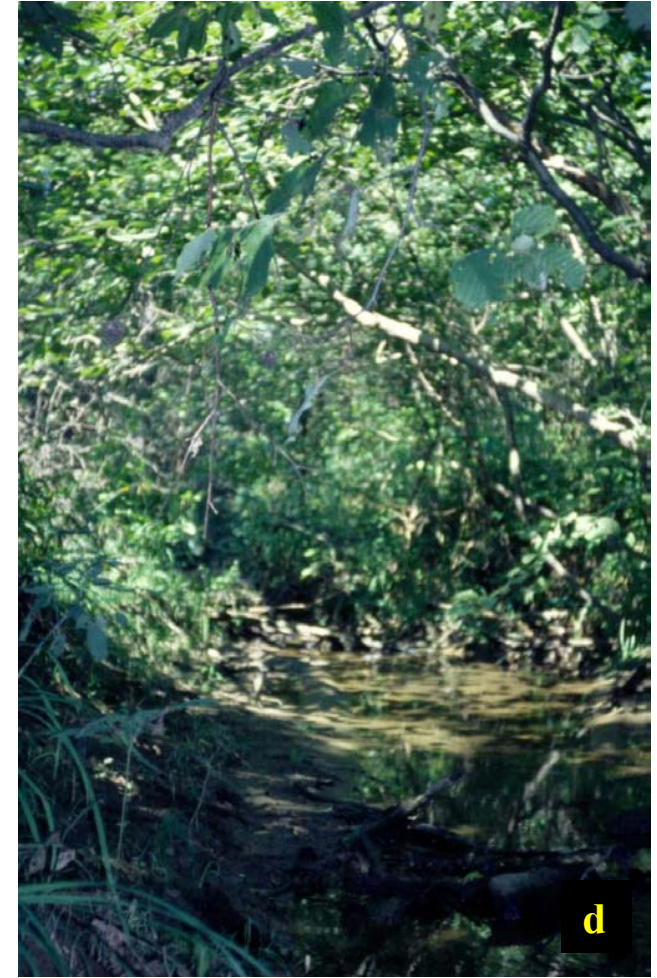
Appendix L-13. Photographs taken of channelized stream reaches near LC-S-1.0~ (a,b) and of a stormwater detention pond outlet near LC-S-0.5. Dates: 9/25/99 (a-b), and 12/9/02 (c).





Appendix L-14. Photographs taken of LC-S near stream mile 0.6~ (a) and 0.4~ (b,d) and also near stream mile 0.2~ (c). Dates: 9/22/99 (a,b,d) and 4/17/00 (c). Note shopping carts in photo b and a tire in photo c.





Appendix L-15. Photographs taken of some trash (a), a powerline area (b; *photo is slightly tilted*), a stormwater outfall pipe (c), and a shaded reach (d) at LC-N near stream mile 0.85 (a,b), 0.6 (c), and 0.4 (d).





Appendix L-16. Photographs taken of people fishing Clark's Pond circa the 1950s (?) (a; from Seeley and Valle 1983) and also of the dam at the base of the pond on 2/11/02 (b-d).





Appendix L-17. Pre-storm culvert photographs taken on 11/10/00 for the first flow-meter calibration event: a) LC-M, b) LC-S, c) RB, and d) LC-N.





Appendix L-18. Pre-storm culvert photographs taken on 9/21/01 for the second flow-meter calibration event: a) LC-M, b) LC-S, c) RB, and d) LC-N.





Appendix L-19. Pre-storm culvert photographs taken on 9/21/01 for the second flow-meter calibration event: a) RB (other side of double culvert).





Appendix L-20. Pre-storm culvert photographs taken on 10/18/00 for the second stormwater monitoring event: a) LC-M, b) LC-S, c) RB, and d) LC-N.





Appendix L-21. Pre-storm culvert photographs taken on 9/25/01 for the third stormwater monitoring event: a) LC-M, b) LC-S, and c) RB. LC-N photo not available.





Appendix L-22. Pre-storm culvert photographs taken on 5/13/02 for the second stormwater monitoring event: a) LC-M, b) LC-S, c) RB, and d) LC-N.